REMARKS

In the Final Office Action mailed November 30, 2006, claims 1-10, 13-20, 23 and 24 are pending in this application. Claims 11, 12, 21, 22, and 25 are withdrawn from consideration. Claims 23-24 have been cancelled in this application. Claims 1-10, 13-20, 23 and 24 stand rejected. Claims 1-5, 7, 9, 10, 13-15, 17, 19-20 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Conklin et al. U.S. Patent No. 5,991,881 ("Conklin") in view of Wong et al. U.S. Patent No. 6,389,419 ("Wong"). Claims 8, 16, and 18 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Conklin in view of Wong, and further in view of "Official Notice." Claim 6 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Conklin in view of Wong, and further to Cox et al U.S. Patent No. 6,842,861 ("Cox"). Applicants traverse the rejections, propose amendments to independent claims 1, 10, and 13 to improve form and to narrow the issues for appeal. Therefore Applicants request entry of the proposed amendments and request reconsideration in light of the following remarks.

Applicants appreciate the time and consideration provided by Examiner Divecha during a telephonic interview with the undersigned on March 29, 2007. During the interview, the undersigned discussed the Wong reference in view of the independent claims. The Examiner agreed that amendments to the claims that clarify that the "target packet" recited in independent claims 1 and 13 was a specific, identified packet, as opposed to merely a packet that shared similar characteristics with a previously received packet, might help overcome the rejection.

Applicants therefore amend independent claims 1 and 13 to recite that the target packet "is a respective one of the plurality of packets" carried over a network link previously recited in the claims. Independent clam 10, as originally presented, though now amended to limit issues for appeal, referred to the packet in question as the "first one of said plurality of packets." Thus, Applicants submit claim 10, as originally presented, clearly recited determining whether a particular packet had been previously been observed.

Amended Independent Claim 1 Patently Distinguishes Over the Cited References

Conklin and Wong, both individually and in combination, fail to teach or suggest each and every element of Amended independent claim 1. Specifically, neither reference teaches or suggests using a flag stored in a memory location associated with a hash value generated from a respective one of a plurality of packets to determine whether the respective packet has previously been encountered. The Final Action concedes that Conklin fails to teach this subject matter. The Action asserts that this subject matter is described in Wong in Figures 6 and 8 and at column 5, line 59—63 and column 6, lines 4—36. As discussed during the interview, Applicants disagree.

The cited passages fail to describe the determination of whether a particular packet has previously been encountered. In contrast, the methodology described in the cited sections relates to a determination of how a system should process a particular packet by first matching it to a connection between two nodes, and then determining whether the packet is an inbound or outbound packet. The technical issue addressed by Wong is generally described in the background as follows,

> Various network appliances are used in networks to intercept packets and process packets. These appliances include load balancers, network address translation (NAT) devices, proxies, firewalls, and packet monitors. These devices monitor or modify packets on a network. In many cases, packets belonging to different connections are treated differently. Often, packets corresponding to different flows in the same connection are handled differently.
>
> Instructions for handling packets in different flows are stored by the network appliance for the purpose of determining how to handle incoming packets. These instructions must be accessed quickly so that packet processing is not unduly delayed...
>
> It would be useful if the lookup process for connection objects could be simplified and sped up for incoming packets. Since a very large number of packets is likely to be received for a given connection, the resources of the network appliance may be taxed as the lookup process is executed many times. Maximizing the efficiency of the lookup process would result in reduced latency in the network appliance.

Column 1, lines 22—35 and column 3, lines 45—52. Thus, Wong is directed to identifying a connection object for a particular packet. It does not disclose determining whether a respective one

of a plurality of packets carried over a network has been encountered, as specifically recited in amended independent claim 1.

Furthermore, as argued in Applicant's prior response, the hash utilized in Wong would be insufficient to identify whether a particular packet has been encountered before. As described in Wong at column 6, lines 4–8:

> When a packet is received, the source and destination of addresses of the packet may be hashed and a match in the has h table occurs for eight the incoming hash or the outgoing hash generated for the connection object.

Thus, the information described by Wong to be used in creating a hash value for à packet is the source and destination address of the packet. Later passages suggest that the hash may also be based on a port number. As one skilled in the art would recognize, the combination of source address, destination address, and port number is insufficient to uniquely identify a particular packet. Any other packet sent between the source and destination in the same direction through the same port would result in the identical hash value. The hash values can only be used to determine what connection the packet is associated with, and whether the packet is an inbound packet or an outbound packet. Therefore, the hashes used in Wong could not possibly be used to determine whether a respective packet has been encountered, as explicitly recited in independent claim 1. Thus, no combination of Wong with Conklin yields the explicit subject matter of independent claim 1.

Applicants therefore request reconsideration and withdrawal of the § 103 rejection of independent claim 1. Claims 2—9 depend on claim 1 and add further limitations thereto. Applicants therefore request reconsideration and withdrawal of the § 103 rejections of claims 2—9, too.

Independent Claims 10 and 13 Patently Distinguishes Over the Cited References

Independent claims 10 and 13 are amended to recite similar subject matter as claim 10 to limit the issues for appeal. That is, claims 10 and 13 are amended to recite a determination of whether a particular packet has previously been observed or received based on a hash value derived

from the packet. Specifically, claim 10 is amended to recite that the determination is based at least in part on a flag set when a packet yielding particular hash value is received. Claim 13 is amended to recite that the determination is based on a comparison of a second hash with a plurality of first hashes derived from previously received packets. As no combination of Conklin and Wong yields a method or system for determining whether a first or respective packet has previously been observed or received based on a hash derived from that particular packet, Applicants request reconsideration and withdrawal of the § 103 rejection of amended independent claims 10 and 13. Claims 14—20 depend on claim 13 and add further limitations thereto. Thus, Applicants request reconsideration and withdrawal of the § 103 rejections of these claims too.

In view of the above amendment, Applicants believe the pending application is in condition for allowance.

Applicants believe no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 18-1945, under Order No. BBNT-P01-368 from which the undersigned is authorized to draw.

Dated: *March 30, 2007*

Respectfully submitted,
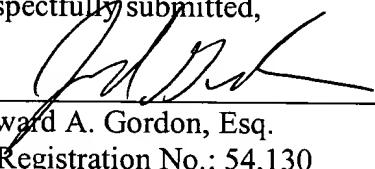
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